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1900 K STREET, N.W.

**SUITE 1200** 

APPLICATION NO.

10/625,605

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WASHINGTON, DC 20006-1109

7590 **HUNTON & WILLIAMS LLP** 

FILING DATE

07/24/2003

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ART UNIT

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)
Office Action Summary		10/625,605	PEISACH ET AL.
		Examiner	Art Unit
		Patrick Butler	1732
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the	correspondence address
THE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. In a period for reply specified above is less than thirty (30) days, a reply of period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be within the statutory minimum of thirty (30) d will apply and will expire SIX (6) MONTHS fro cause the application to become ABANDON	timely filed lays will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133).
Status			
2a)⊠	Responsive to communication(s) filed on <u>19 Sec</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, p	
Dispositi	ion of Claims		
5) <u></u> 6)⊠	Claim(s) 15 and 17-31 is/are pending in the apple 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) 15 and 17-31 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.	
Applicati	ion Papers		
10)⊠	The specification is objected to by the Examiner The drawing(s) filed on <u>24 July 2003</u> is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Example 1.	☑ accepted or b) ☐ objected to drawing(s) be held in abeyance. S on is required if the drawing(s) is o	ee 37 CFR 1.85(a). Objected to. See 37 CFR 1.121(d).
	under 35 U.S.C. § 119		
12)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior application from the International Bureau	s have been received. s have been received in Applica ity documents have been recei	ation No
* 5	See the attached detailed Office action for a list of	of the certified copies not receiv	ved.
Attachmen	t(s)		
2) D Notic 3) D Inform	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	4) Interview Summa Paper No(s)/Mail 5) Notice of Informal 6) Other:	

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#### **DETAILED ACTION**

### Response to Amendment

The Applicant's Amendments and Accompanying Remarks, filed 19 September 2005, have been entered and have been carefully considered. No claims are new, Claims 15, 18, and 28 are amended, Claim 16 is canceled, and Claims 15 and 17-31 are pending.

In view of Applicant's canceling Claim 16, the Examiner withdraws the previously set forth Double Patenting statement regarding Claims 16 and 18 as detailed in the Specification section of the Office Action dated 19 May 2005.

In view of Applicant's amendment of claims 15, 18, and 28 to clarify the claims, the Examiner withdraws the previously set forth 35 U.S.C. 112, second paragraph objection as set forth in the Claim Rejections - 35 USC § 112 section of the Office Action dated 19 May 2005.

Despite these advances, the invention as currently claimed is not found to be patentable for reasons herein below.

The Text of those sections of Title 35, US Code not included in this action can be found in a prior Office Action.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claim 28 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new subject matter is the "5 to about 10 % volume adhesive". The Specification, particularly p. 15, lines 1-7 cited by Applicant within Remarks filed 19 September 2005, does not teach this particular amount of adhesive. It refers to "those skilled in the art" to teach an appropriate amount. Neither does it specifically teach the amount, nor does it refer to any particular reference to rely on for this portion of the presently claimed invention. The quantity of adhesive relied upon to be claimed subject matter of the Patent was introduced via Amendment on 19 September.

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 15-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Jonas et al (5,234,126).

With regard to claim 15, Jonas et al teach a method for forming a plastic container for hot-filled food product (abstract; claim 1), comprising: selecting at least one polymer for a plastic container (column 13, lines 57-68); and forming the plastic

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container (column 14, lines 1-5); wherein the plastic container comprises: a mouth; a bottom surface; and a container wall between the mouth and the bottom surface (column 8, lines 59-68), wherein prior to hot-filling of the container with a food product, the bottom surface is outwardly flexed; wherein further one of the outwardly flexed bottom surface or the container wall is configured to flex inward into the cavity of the plastic container during cooling of the plastic container following hot-filling of the container with food product (column 5, lines 19-27; Fig. 3 [see outwardly deflected portion of bottom surface]); wherein further the inward flexing of the bottom surface of the container wall reduces a pressure differential between the inside of the container and atmospheric pressure when either the container is hot-filled with food product or when the container is transported from a locale of lower atmospheric pressure to higher atmospheric pressure (claim 1); and wherein further the non-flexing surface maintains the same form from prior to hot-filling or transport, wherein further the flexing surface maintains its inwardly flexed configuration following cooling of the hot-filled container (claim 1; see column 5, lines 19-27).

With respect to the preamble and content of Claim 15 about what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

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With regard to claim 17, Jonas et al teaches forming the container may comprise extrusion, injection molding, and blow molding (column 14, lines 1-5).

With regard to claim 18, Jonas et al teach a method for forming a plastic container with a selectively deformable surface (abstract), comprising: selecting at least one polymer for a plastic container (column 13, lines 57-68); and thermoforming a container from the heated polymer (column 14, lines 1-5); wherein the plastic container comprises: a mouth; a bottom surface; and a container wall between the mouth and the bottom surface (column 8, lines 59-68), wherein prior to hot-filling of the container with a food product, the bottom surface is outwardly flexed; wherein further one of the outwardly flexed bottom surface or the container wall is configured to flex inward into the cavity of the plastic container during cooling of the plastic container following hotfilling of the container with food product (column 5, lines 19-27; see Fig. 3 [see outwardly deflected portion of bottom surface]); wherein further the inward flexing of the bottom surface of the container wall reduces a pressure differential between the inside of the container and atmospheric pressure when either the container is hot-filled with food product or when the container is transported from a locale of lower atmospheric pressure to higher atmospheric pressure (claim 1); wherein further the non-flexing surface maintains the same form from prior to hot-filling or transport, and wherein further the flexing surface maintains its inwardly flexed configuration following cooling of the hot-filled container (claim 1; column 5, lines 19-27). Official notice is taken of the fact that it is well known to heat a plastic sheet to its VICAT temperature before thermoforming.

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With respect to the preamble and content of Claim 18 about what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

With regard to claim 20, Jonas et al teach that the bottom surface flexes inward into the container cavity (column 5, lines 19-28).

3. Claims 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by McHenry et al (4,667,454).

With regard to claim 18, McHenry et al teach a method for forming a plastic container with a selectively deformable surface (abstract), comprising: selecting at least one polymer for a plastic container (column 4, lines 48-61); and thermoforming a container from the heated polymer (column 3, line 39); wherein the plastic container comprises: a mouth; a bottom surface; and a container wall between the mouth and the bottom surface (Figure 1A), wherein prior to hot-filling of the container with a food product, the bottom surface is outwardly flexed (Figure 1A); wherein further one of the outwardly flexed bottom surface or the container wall is configured to flex inward into the cavity of the plastic container during cooling of the plastic container following hot-filling of the container with food product (Figure 1B); wherein further the inward flexing of the bottom surface of the container wall reduces a pressure differential between the

inside of the container and atmospheric pressure when either the container is hot-filled with food product or when the container is transported from a locale of lower atmospheric pressure to higher atmospheric pressure (reduction of volume will inherently perform this task); and wherein further the non-flexing surface maintains the same form from prior to hot-filling or transport, wherein further the flexing surface maintains its inwardly flexed configuration following cooling of the hot-filled container (Figure 1A and 1B). Official notice is taken of the fact that it is well known to heat a plastic sheet to its VICAT temperature before thermoforming.

With respect to the preamble and content of Claim 18 about what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

With regard to claim 19, McHenry et al teach that the thickness of the container walls decreases from a point substantially at the mouth (figure 5, T2) to a point substantially at the bottom surface (figure 5, T5).

4. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Agrawal et al (5,234,126).

With regard to claim 18, Agrawal et al teach a method for forming a plastic container with a selectively deformable surface (abstract), comprising: selecting at least

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one polymer for a plastic container (abstract, polyester); and thermoforming a container from the heated polymer (column 6, lines 44-50); wherein the plastic container comprises: a mouth; a bottom surface; and a container wall between the mouth and the bottom surface (Figure 6), wherein prior to hot-filling of the container with a food product, the bottom surface is outwardly flexed; wherein further one of the outwardly flexed bottom surface or the container wall is configured to flex inward into the cavity of the plastic container during cooling of the plastic container following hot-filling of the container with food product (abstract; see Fig. 3, Ref. 64 [outwardly flexed]); wherein further the inward flexing of the bottom surface or the container wall reduces a pressure differential between the inside of the container and atmospheric pressure when either the container is hot-filled with food product or when the container is transported from a locale of lower atmospheric pressure to higher atmospheric pressure (reduction of volume will inherently perform this task); and wherein further the non-flexing surface maintains the same form from prior to hot-filling or transport (see col. 10, lines 65-68). Official notice is taken of the fact that it is well known to heat a plastic sheet to its VICAT temperature before thermoforming.

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With respect to the preamble and content of Claim 18 about what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As

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it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas et al (5,234,126) in view of Hodson et al (US 2002/0187290).

With regard to claim 21, Jonas et al teach the invention of claim 20 as discussed above, but does not explicitly teach that the circumference of the mouth is greater than the circumference of the bottom surface. Hodson et al teaches a container for food storage that can be used with a hot fill application (paragraph 0057) in which the circumference of the mouth is greater than the circumference of the bottom surface (figure 3). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to create a container where the circumference of the mouth is greater than the circumference of the bottom in the process of Jonas et al. The motivation to do so would have been to facilitate easy removal of a semi-solid food product from the container.

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With regard to claim 22, Jonas et al teach that the plastic/polypropylene (column 13, line 65) comprises a plastic suitable for solid phase pressure forming (column 14, line 5, thermoforming).

With regard to claim 23, Jonas et al teach the plastic further comprises polypropylene (column 13, line 65).

With regard to claim 24, Jonas et al teach the plastic further comprises a barrier enhancement agent (column 13, line 64, EVOH).

With regard to claim 25, Jonas et al teach the barrier enhancement agent comprises ethylene vinyl acetate-vinyl alcohol (column 13, line 64, EVOH).

With regard to claim 26, Hodson et al teach the plastic further comprises an adhesive suitable for solid phase pressure forming, polypropylene and EVOH (paragraph 0052).

7. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas et al (5,234,126) in view of Hodson et al (US 2002/0187290) and Hope et al (5,202,192).

With regard to claim 27, Jonas et al in view of Hodson et al teach the invention of claim 26 as discussed above, but do not explicitly teach that the adhesive contains an antioxidant. Hope et al teaches a plastic container comprising an adhesive blend containing an antioxidant (column 2, lines 66-68). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add an antioxidant to the adhesive taught by Hodson et al. The motivation to do so would have been protect the food contained in the container from oxidation.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas et al (5,234,126) in view of Hodson et al (US 2002/0187290) as applied to Claim 22 above, and further in view of McHenry et al. II (US Patent No. 4,554,190).

With respect to Claim 28 McHenry II teaches a plastic container with the components of Hodson (polypropylene, EVOH, and adhesive) (see col. 18, lines 39-42). The components are 5% EVOH (<15%), 6% adhesive (5-10%), and 89% PP (80-90%) (see col. 18, lines 39-42), which meets the limitations of the claim.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McHenry II's plastic component portions with the structure taught by Jonas in view of Hodson because McHenry II's invention is within the same field of endeavor as Jonas in view of Hodson as it is directed to making plastic containers (abstract) and contains the same components (see col. 18, lines 39-42).

8. Claims 29-31 are rejected under 35 U.S.C. 103(a) as unpatentable over Agrawal et al (5,234,126).

With regard to claim 29, Agrawal et al teach a range of preform, neck, wall, and bottom thicknesses that anticipate the ranges described by claim 29. Agrawal et al teach that the preform may be1250 to 5000 µm thick (column 6, lines 15-18), the wall thickness may be 250 to 900 µm thick, the bottom may be 250 to 1800 µm thick and the shoulder area may be 350-1250 µm thick (column 12, lines 52-61). For example, the equation would be satisfied if the preform were 1600 µm thick, the shoulder was 1250 µm thick, the wall was 600 µm thick and the bottom were 300 µm thick.

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With regard to claim 30, Agrawal et al teach that the container does not have uniform wall thickness due to the differences in the amount of stretch in different areas. Stretching a preform with uniformly thick walls will result in a uniform decrease in thickness from the top to the bottom of the finished container.

With regard to claim 31, Agrawal et al teach the invention of claim 30 as discussed above, but does not explicitly disclose the thicknesses of 0.7 mm at the mouth, 0.28 mm near the bottom, and 0.16 mm at the bottom of the container. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used these thicknesses, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art and it is well known that the thickness of a container is a result effective variable where the result is the crush strength of the container. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

#### Response to Arguments

Applicant's arguments filed [filing date] have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC 102 and 103 rejections. Applicant's arguments appear to be on the grounds that:

1) Jonas does not teach each and every limitation of Claims 15 and 18 as amended, particularly that the bottom surface is outwardly flexed.

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2) Jonas is suitable for terminal sterilization rather than hot-fill because terminal sterilization is 250 degrees F and hot-fill is at 180 degrees F, therefore it would not be able to flex.

- 3) The outward flexed bottom surface is not inherent in Jonas.
- 4) The flexing during terminal sterilization of Jonas is not consistent with the flexing of hot-fill in the instant claims 15 and 18.
- 5) McHenry does not teach each and every limitation of Claims 15 and 18 as amended, particularly that the bottom surface is outwardly flexed.
- 6) McHenry does not disclose a container for hot-fill packaging because it is suitable for sterilization at 250 degrees F.
  - 7) The outward flexed bottom surface is not inherent in McHenry.
- 8) Agrawal does not teach each and every limitation of Claims 15 and 18 as amended, particularly that the bottom surface is outwardly flexed.
- 9) Agrawal's surface changes in response to the volume decrease brought on by adding hot materials which does not cause it to flex inward when it is used in hot-filling, Therefore, it does not flex inward and stay inward during cooling.
  - 10) The outward flexed bottom surface is not inherent in Agrawal.
- 11) The rejection of Claims 21-26 over Jonas in view of Hodson is not a prima facie case of obviousness because Hodson does not make up for the deficiencies of Jonas.

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12) The rejection of Claim 27 over Jonas in view of Hodson and Hope is not a prima facie case of obviousness because Hodson and Hope do not make up for the deficiencies of Jonas.

13) The rejection of Claims 29-31 over Agrawal does not supply the deficiencies previously described in the rejection of Claim 18.

The Applicant's arguments are addressed as follows:

1and 3) The examiner relies on Jonas Fig. 3 to show an outwardly flexed bottom surface.

2, 4, 6, and 9) With respect to the preamble and content of Claim 15 and 18 about what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

5 and 7) The examiner relies on McHenry Fig. 1A to show an outwardly flexed bottom surface.

8 and 10) The examiner relies on Agrawal Fig. 3 to show an outwardly flexed bottom surface.

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11, 12, and 13) As the primary references have been shown to cover the claimed matter of the independent Claims 15 and 18, the secondary references are not relied upon to cover the subject matter of Claims 15 and 18.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is 571-272-8517. The examiner can normally be reached on Monday through Friday 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 571-272-1196. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick Butler Assistant Examiner Art Unit 1732

MICHAEL P. COLAIANNI SUPERVISORY PATENT EXAMINER